UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,278	01/05/2001	Hiroshi Kubota	NEC00P344-si	3059

21254 7590 10/10/2003

MCGINN & GIBB, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER	
PEREZ, JULIO R	
ART UNIT	**PAPER NUMBER**
2681	6

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/754,278	KUBOTA, HIROSHI	
	Examiner	Art Unit	
	Julio R Perez	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-7 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 4 to 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Bender et al. (6,002,933).

Regarding claim 1, Bender et al. disclose a mobile communication system (Figure 2) comprising: a mobile station (20); a base station (22A, B, C, or D) disposed in each of service areas for performing radio communication with the mobile station (20) positioned in each of service areas (Figure 2); a base station controller (24A) having channel station data indicative of whether there is a channel (46, interconnect coupled between BSC 24A and BSC 24B) between a mobile switching center as a master station (first home MSC, where BSC 24A is located within, which, in turn, comprises CDMA interconnect subsystem (CIS 30) coupled to base stations (22A) and (22D), selector subsystem (40), admission control subsystem 44, and interconnect 46), thereof and another mobile switching center (other MSC, where BSC 24B is located within) said base station controller (24B) having means for, when a hand-off control process is to be performed via said mobile switching center as the master station (first home MSC, where BSC 24A is located within) while communicating with said mobile terminal (20) through said base station (22A); (Column 4, lines 29-50), determining whether said mobile switching center as the master station (first home MSC, where BSC 24A is

located within) has a channel (data link 46) connected to the other mobile switching center (other MSC, where BSC 24B is located within) or not based on said channel station data, and, if said mobile switching center as the master station (first home MSC, where BSC 24A is located within) has a channel (46) connected to the other mobile switching center (other MSC, where BSC 24B is located within), requesting a hand-off control process as a process for switching communication channels for communication with said mobile station (20). (Therein, the various systems that make up BSC 24A exchange channel station data (signaling and information) using network packets that are routed by CIS (30). CCP (42) allocates and deallocates resources for processing the call including signal processing resources within base stations (22A –22D) and selector resources within selector subsystem (40), (column 4, lines 42-63)); and a mobile switching center as the master station (first home MSC, where BSC 24A is located within) of said base station controller (24A), for performing a hand-off control process between itself and said other mobile switching center (other MSC, where BSC 24B is located within) when said hand-off control process is requested (column 4, line 66 and column 5, lines 1-19).

Regarding claim 2, Bender et al. disclose a mobile communication system comprising (Figure 2): a mobile station (20); one or more base stations (22A, B, C, and D) disposed in each of service areas for performing radio communication with the mobile station (20) positioned in each of service areas; one or more base station controllers serving as a master station (24A) of said one or more base stations (22A-D) and having channel station data indicative of whether there is a channel (46) between a

mobile switching center as a master station (other MSC, where BSC 24B is located within) thereof and another system mobile switching center in another system of different specifications (first home MSC, where BSC 24A is located within), said one or more base station controllers (24A-B) having means for, when a hand-off control process is to be performed via said mobile switching center as the master station (first home MSC, where BSC 24A is located within) while communicating with said mobile terminal (20) through said base station (22A-D) during an inter-base-station-controller soft hand-off control process (column 5, lines 18-43), determining whether said mobile switching center as the master station (first home MSC, where BSC 24A is located within) has a channel (46) connected to the other system mobile switching center (other MSC, where BSC 24B is located within) or not based on said channel station data (column 5, lines 8-19), and, if said mobile switching center as the master station first home MSC, where BSC 24A is located within) has a channel (46) connected to the other system mobile switching center (other MSC, where BSC 24B is located within), requesting an inter-system hand-off control process (column 5, line 19) as a process for switching communication channels between said mobile station (first home MSC, where BSC 24A is located within) and said other system mobile switching center (other MSC, where BSC 24B is located within) to said mobile switching center as the master station (first home MSC, where BSC 24A is located within), and, if said mobile switching center as the master station(first home MSC, where BSC 24A is located within) does not have a channel connected to the other system mobile switching center (other MSC, where BSC 24B is located within), requesting an intra-system hand-off control process (column

7, lines 50-52) between said mobile station (20) and the mobile switching center in a home system (first home MSC, where BSC 24A is located within); and one or more interconnected mobile switching centers serving as a master station of at least one of said one or more base station controllers (24A-B), for performing said hand-off control process in a home system when the intra-system hand-off control process is requested, at least one of said one or more interconnected mobile switching centers (first home MSC, where BSC 24A is located within) having a communication channel 46 connected to the other system mobile switching center (other MSC, where BSC 24B is located within), for performing a predetermined hand-off control process between itself and said other system mobile switching center (other MSC, where BSC 24B is located within) when said inter-system hand-off control process is requested (column 7, lines 50-67 and column 8, lines 1-4).

Regarding claim 3, Bender et al. disclose a mobile communication system (Figure 2) further comprising a communication channel (46) between only a mobile switching center (first home MSC, where BSC 24A is located within, which comprises BSC 24, CIS 30, Selector switch 40, CCP 42, and Admission Control Subsystem 44) adjacent to a service area of the other system including an overlay and said other system mobile switching center (other MSC, where BSC 24B is located within, Figure 2; column 4, lines 42-53).

Regarding claim 4, Bender et al. disclose a mobile communication system (Figure 2) wherein said mobile switching center (first home MSC, where BSC 24A is located within) comprises means for, when said intra-system hand-off control process is

requested (column 7, lines 62-67 and column 8, lines 1-4), selecting a mobile switching center in the home system (first home MSC, where BSC 24A is located within) which has a communication channel (46) connected to said other system mobile switching center (other MSC, where BSC 24B is located within), and performing a hand-off control process between itself and the selected mobile switching center (column 8, lines 5-9).

Regarding claim 5, Bender et al. disclose a mobile communication system (Figure 2) wherein said home system (first home MSC, where BSC 24A is located within) comprises a mobile communication system (Figure 2) according to code division multiple access principles. (Therein, a radio frequency signal interface operating in accordance with physical signal modulation techniques of the IS-95 over-the-air protocol including the use of CDMA signal modulation; column 3, lines 60-64).

Regarding claim 6, Bender et al. disclose a mobile communication system (Figure 2) wherein said home system comprises a mobile communication system according to code division multiple access principles. (Wherein the home mobile communication system (Figure 2) operating in accordance with physical signal modulation techniques of the IS-95 over-the-air protocol including the use of CDMA signal modulation; column 3, lines 60-67).

Regarding claim 7, Bender et al. disclose a mobile communication system (Figure 2) wherein said home system comprises a mobile communication system according to code division multiple access principles. (Wherein a mobile unit (20) interfaces with base station (22A), which is connected to home base station controller

(24A), via RF signals modulated in accordance with the IS-95 standard, and therefore using CDMA modulation techniques; column 4, lines 33-37).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the art with respect to mobile telecommunication system handoffs.

US Pat. N0. 5,937,019 to Padovani, a network user communicates through a remote unit via a base station.

US Pat. N0. 6,470,188 to Ohtani et al., mobile communication system including a network comprising at least one MSC.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R Perez whose telephone number is (703) 305-8637. The examiner can normally be reached on Monday - Friday, 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

JRP
10/8/03

SINH TRAN
PRIMARY EXAMINER